

### **REMARKS**

Claims 1, 2, 4-11, and 13-47 were pending. Applicants note that the Office Action Summary incorrectly stated that only claims 1, 2, 4, 11, 13, and 27-44 were pending. Claims 5-10, 14-19, 21-26, 29, 30, 32, 33, 36, 37, and 45-47 are also pending and have been withdrawn as being drawn to non-elected inventions or species.

Claim 20 has been canceled without prejudice. Applicants reserve the right to prosecute the subject matter of the canceled claim in one or more related applications. New claim 48 has been added. Support for new claim 48 can be found in the specification at p. 31, lines 14-16. No new matter is introduced. Upon entry of the amendment made herein, claims 1, 2, 4-11, 13-19, and 21-48 will be pending.

The drawing description in the substitute specification filed on November 15, 2004 has been amended to indicate which sequence identifier (SEQ ID NO) pertains to each amino acid sequence depicted in Figures 1-7. In particular, paragraphs [0039] to [0045] in the *Brief Description of the Drawings* of the substitute specification has been amended to include SEQ ID NO:357, SEQ ID NO:359, SEQ ID NO:368, and SEQ ID NO:367 for the peptides having the amino acid sequence SIINFEKL, NLLRLTGW, SIINFEKLGSGHWDFAWPW, and SIINFEKLGSGNLLRLTGW, respectively. Support for these amendments can be found in the specification, as filed, in Figures 1-7 and at page 40, lines 3-13; page 40, line 30 to page 41, line 7; page 42, lines 11-14; page 42, lines 20-25; page 42, line 27 to page 43, line 3; page 43, lines 5-9; and page 43, lines 12-16. Accordingly, no new matter is introduced.

### **Election/Restriction**

Applicants hereby confirm the provisional election with traverse of the species herpes virus as an infectious agent with respect to the claims of elected Group I.

### **Information Disclosure Statement**

The Examiner indicates that the information disclosure statement ("IDS") submitted on July 14, 2006 was filed and considered. However, with respect to the IDS submitted on April 10, 2006, the Examiner indicates that sheet 1 of 7 of the "List of References Cited by Applicant," listing references A01-A19 and B01-B04, and reference A01 are missing from the record.

Applicants submit herewith a copy of the return receipt postcard to evidence the receipt of the IDS mailed on April 10, 2006, including reference A01 and sheet 1 of the List of References Cited by Applicant, by the U.S. Patent and Trademark Office. Applicants also enclose a copy of the corresponding Express Mail label (dated April 10, 2006). Further, Applicants enclose herewith a copy of sheet 1 of the "List of References Cited by Applicant," listing references A01-A19 and B01-B04 and bearing the Express Mail No. EV654849573US, as filed on April 10, 2006, and a copy of reference A01. Applicants respectfully request that the Examiner consider references A01-A19 and B01-B04.

#### Objection to the Specification

The Examiner objects to the specification for failing to indicate which sequence identifier pertains to each amino acid sequence depicted in Figures 1-7. In response, Applicants point out that the substitute specification filed on November 15, 2004 contained the appropriate sequence identifiers for the sequences of Figures 1-7 (although not in the *Brief Description of the Drawings*). Applicants have amended the substitute specification in the *Brief Description of the Drawings* (paragraphs 39-45) to recite the sequence identifiers for the amino acid sequences SIINFEKL (SEQ ID NO:357), NLLRLTGW (SEQ ID NO:359), SIINFEKLGS GHWDFAWPW (SEQ ID NO:368), and SIINFEKLGS GNLLRLTGW (SEQ ID NO:367), which are depicted in Figures 1-7. Thus, Applicants respectfully request that the objection to the specification be withdrawn.

#### The Rejection Under 35 U.S.C. § 102(e)

The Examiner has rejected claims 1, 2, 4, 11, 13, 27, 28, 31, 34, 35, and 38-44 under 35 U.S.C. § 102(e) as being anticipated by Wieland et al., U.S. Patent Application Publication No. 2004/0071656 ("Wieland"), which is the publication of U.S. Patent Application No. 10/328,953, filed on December 23, 2002, and claims priority benefit of a provisional application filed on December 26, 2001. The Examiner contends that Wieland teaches a composition of a heat shock protein non-covalently linked to an antigen via a polypeptide that can be used in inducing an immune response in a mammal, and that one of the polypeptides listed is homologous to SEQ ID NO:417 (NLLRLTGW) of the claimed invention. Further, the Examiner states that Wieland discloses infectious disease antigens such as herpes virus that can be non-covalently linked to a heat shock protein such as hsc70, which can also function as an adjuvant.

In response, Applicants submit that claims 1, 2, 4, 11, 13, 27, 28, 31, 34, 35, and 38-44 are not anticipated by Wieland for the reasons set forth below.

The claims of the instant application are directed to a hybrid antigen comprising at least one antigenic domain of an infectious agent or tumor antigen and a binding domain that non-covalently binds to a heat shock protein, wherein the binding domain comprises the amino acid sequence Asn Leu Leu Arg Leu Thr Gly Trp ("NLLRLTGW"), Phe Tyr Gln Leu Ala Leu Thr Trp ("FYQLALTW"), or Arg Lys Leu Phe Phe Asn Leu Arg Trp ("RKLFFNLRW"), and to related compositions and methods.

Wieland discloses a hybrid antigen comprising an antigenic domain, a heat shock protein binding domain, and optionally a short peptide linker interposed therebetween (*see* Wieland at ¶20). In particular, the heat shock protein binding domain can comprise the amino acid sequence NLLRLTGW, FYQLALTW, or RKLFFNLRW (*see* Wieland at ¶¶129-130).


Attorneys for Applicants believe that the above-noted disclosure in Wieland was derived from the inventors of the presently claimed subject matter. Attorneys for Applicants are investigating this matter.

### **CONCLUSION**

Applicants respectfully request that the above remarks and amendments be entered and made of record in the file history of the instant application.

Respectfully submitted,

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